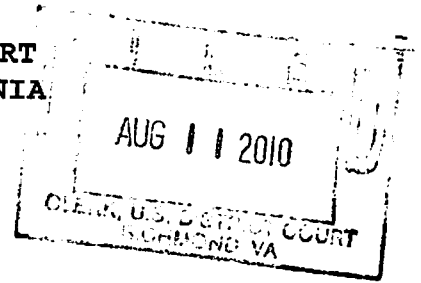


IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division



WiAV SOLUTIONS LLC

Plaintiff,

v.

Civil No. 3:09cv447

MOTOROLA, INC. et al.,

Defendants.

MEMORANDUM OPINION

This matter is before the Court on Defendants' MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT (Docket No. 309). To the extent that the Defendants seek judgment as to literal infringement, genuine issues of material fact exist and the motion is denied. For the reasons set forth below, the motion is granted to the extent that it asserts that no genuine issue of material fact exists as to infringement under the doctrine of equivalents.

BACKGROUND

The Plaintiff, WiAV Solutions LLC ("WiAV") asserts a claim against the Defendants, Motorola, Inc., Nokia, Inc. and Nokia Corp. (collectively "the Defendants") for infringement of U.S. Patent No. 6,539,205 (the "Patent"). WiAV alleges that two groups of products infringe the Patent: (1) mobile phones that use the Adaptive Multi-Rate

(AMR) codec with the EDGE network protocol and (2) mobile phones that use the High Speed Downlink Packet Access (HSDPA) protocol to transfer data from the network to the mobile phone.

The Patent improves communication quality by providing a method for monitoring the quality of a traffic channel and modifying the amount of error correction overhead applied to a traffic channel in response to the quality. '205 Patent at 2:17-23. Error correction overhead adds redundancy data to the data stream to assist in detecting and correcting errors during transmission. Id. at 4:22-35. The Patent acknowledges that "[v]arious methods exist[ed] for determining the quality of the traffic channel" including calculating the bit error rate on the traffic channel. Id. at 1:66-2:2. However, according to the Patent, the "traffic channel provides an unreliable channel quality indicator due to its high incidence of noise." Id. at 2:2-4. The novelty of the '205 Patent, therefore, is its use of a channel quality measurement from a control channel, which more accurately evaluates the quality of the traffic channel.¹ Id. at 2:13-36.

¹ WiAV asserts that the Patent's novelty is defined by the claims, not the specification.

I. Measuring Channel Quality

A. HSDPA

The accused HSDPA handsets calculate a Channel Quality Indicator or CQI value using a signal to interference ratio ("SIR"), which is distinct from a bit error rate or BER measurement. (Def. Ex. 12 at ¶¶ 66-70; Def. Ex. 20 at ¶¶ 134-35.) The SIR is estimated based on a comparison of the received signal strength to the amount of interference in the signal. (Def. Ex. 12 at ¶¶ 66-70; Def. Ex. 20 at ¶¶ 134-35.)

The Common Pilot Channel or CPICH signal does not carry any error correction bits. (Def. Ex. 12 at ¶ 94; Def. Ex. 20 at ¶ 159.) The accused HSDPA handsets do not compare a corrected version of the CPICH signal against the uncorrected received signal. (Id. at ¶¶ 159-60; Def. Ex. 12 at ¶ 94.) The accused HSDPA handsets do not generate a BER measure for the CPICH signal. (Def. Ex. 20 at ¶¶ 159-60; Def. Ex. 12 at ¶ 94.) The CPICH serves as a "beacon" signal to indicate the presence of a base station.² (Def. Ex. 20 at ¶ 129; Def. Ex. 12 at ¶ 94.) The CPICH is a signal whose value is predetermined as the mathematical combination of three values: a 20-bit long CPICH value, a

² According to WiAV, a beacon signal is a control signal under the AMR/EDGE specifications. (Def. Ex. 16 at § 3.3.6.)

channelization code, and a sequence. (Def. Ex. 9 at 142:20-143:16.)

B. EDGE

EDGE handsets estimate channel quality by measuring the training sequence of a normal burst. The training sequence is 26 bits long and is transmitted in the middle of every normal burst. (Def. Ex. 16 at § 5.2.3.) On each side of the training sequence bits in a normal burst are two 57 bit long regions that carry coded data. (See Def. Ex. 18 at 81.) The two 57-bit data fields may be used to carry data, such as voice or control data. (Def. Ex. 9 at 175:1-21.) According to the specifications, the training sequence can take eight different possible values. (Def. Ex. 16 at § 5.2.3; Def. Ex. 12 at ¶ 135.) The same training sequence is used in all normal bursts carrying traffic or control data to a particular mobile phone. (Def. Ex. 20 at ¶ 46; Def. Ex. 9 at 12:3-12.) The training sequence is used by the mobile phone to adjust the equalizer in its receiver to provide the best possible correction for multipath and signal distortion and to identify the encoded parts of the normal burst. (Def. Ex. 18 at 81-83; Def. Ex. 11 at 183-84.)

The accused EDGE products derive channel quality measurements using a signal to noise ratio (SNR) or carrier

to interface ratio (C/I) calculated by measuring the ratio of the signal power received by the equalizer that corresponds to the fixed training sequence and dividing that by the portion of the energy received by the equalizer that corresponds to signal interference. (Def. Ex. 12 at ¶ 154; Def. Ex. 20 at ¶ 68.) The accused EDGE handsets do not calculate a corrected version of the received training sequence. (Def. Ex. 12 at ¶ 180; Def. Ex. 20 at ¶¶ 92.) The accused EDGE handsets do not compare a corrected version of the received training sequence against the uncorrected training sequence. (Def. Ex. 12 at ¶ 180; Def. Ex. 20 at ¶¶ 90, 92.) The accused EDGE handsets do not generate a BER measure for the training sequence. (Def. Ex. 12 at ¶ 180; Def. Ex. 20 at ¶¶ 90; Def. Ex. 9 at 94:7-9.)

DISCUSSION

I. Standard of Review

Summary judgment is appropriate where there is no genuine issue as to any material fact in the case. See FED. R. Civ. P. 56(c). Once a motion for summary judgment is properly made and supported, the opposing party has the burden of showing that a genuine dispute exists. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986). A material fact in dispute appears

when its existence or non-existence could lead a jury to different outcomes. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A genuine issue of material fact exists when there is sufficient evidence on which a reasonable jury could return a verdict in favor of the non-moving party. See id.

Hence, summary judgment is only appropriate when, after discovery, the non-moving party has failed to make a "showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). When a motion for summary judgment is made, the evidence presented must always be taken in the light most favorable to the non-moving party. Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998).

Nevertheless, a party cannot create a genuine issue of material fact through unsupported opinions. See Davis v. Brouse McDowell, L.P.A., 596 F.3d 1355, 1364 (Fed. Cir. 2010). Accordingly, the party who bears the burden of proof at trial cannot survive summary judgment without sufficient evidence to sustain his or her burden of proof on that point. Celotex Corp., 477 U.S. at 327.

II. Infringement Under the Doctrine of Equivalents

Patent infringement requires that every element and limitation be embodied in the accused system, literally or by the doctrine of equivalents. Hutchins v. Zoll Med. Corp., 492 F.3d 1377, 1380 (Fed. Cir. 2007). Courts have developed two tests to determine equivalency. The primary test is the "function-way-result" test, "whereby the patentee may show an equivalent when the accused product or process performs substantially the same function, in substantially the same way, to achieve substantially the same result, as disclosed in the claim." Abbott Labs. V. Sandoz, Inc., 566 F.3d 1282, 1296 (Fed. Cir. 2009). The other test requires proof that "the differences between the invention as claimed and the accused product or process are insubstantial." Id. at 1297. In either case, the doctrine of equivalents requires element-by-element proof." Id. at 1296-97. When a claim for infringement is brought under the doctrine of equivalents, summary judgment is appropriate where "no reasonable jury could determine two elements to be equivalent." Warner-Jenkins Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 39 n.8 (1997).

Further, while the doctrine of equivalents is usually a question for the jury, various legal limitations on the doctrine are to be determined by the court by way of a

motion for summary judgment. Id. For example, the "all-elements" rule "holds that an accused product or process is not infringing unless it contains each limitation of the claim, either literally or by an equivalent." Freedman Seating Co. v. American Seating Co., 420 F.3d 1350, 1358 (Fed. Cir. 2005). The "all-elements" rule requires first that equivalence be assessed on an element-by-element basis. Id.

Additionally, as a corollary to the "all-elements" rule, "an accused product or process is not, as a matter of law, equivalent to a limitation of the claimed invention if such a finding would entirely vitiate the limitations." Id. There is "no set formula for determining whether a finding of equivalence would vitiate a claim limitation." Id. at 1359. Thus, courts consider the totality of the circumstances and "determine whether the alleged equivalent can be fairly characterized as an insubstantial change from the claimed subject matter without rendering the pertinent limitation meaningless." Id. And, "if a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment should be rendered by the court, as there would be no further material issue for the jury to resolve." Warner-Jenkins Co., 520 U.S. at 39 n.8.

Claims 1, 16, 18, 19 and 21 of the Patent require a "control channel." The Court construed the term "control channel" as "a channel that provides a communications link between the mobile station and the base station for mobile management tasks." According to the Patent, mobile management tasks include "mobile location, in-coming call traffic control, billing information, security verifications, paging or broadcast services." '205 Patent at 4:17-22. WiAV asserts that, even if literal infringement is not found, the training sequence and the CPICH (the "Accused Functionalities") are equivalent to a control channel. The Defendants disagree, asserting that substantial differences exist between the control channel and the Accused Functionalities.

First, the Defendants assert that the training sequence and the CPICH are substantially different from a control channel because control channels carry data, and the training sequence and CPICH do not. The Patent makes clear that the control channel carries data, albeit a small amount. See '205 Patent at 1:43-50 ("...Examples of data exchanged over the one or more control channels include mobile station location, in-coming call traffic control, billing information, and security verifications...The amount of data exchanged over the control channel is

relatively insignificant compared to the amount of data exchanged over the traffic channel."); 5:63-6:1 ("One advantage over prior systems is that data on the control channel provides a better indication of the true channel quality because the high degree of error correction included on the control channel allows the receiving station to create an exact replication of the transmitted signal..."). In contrast, the undisputed facts show that the Accused Functionalities are fixed sequences that do not carry data. (See Def. Ex. 9 at 25:18-26:13, 29:6-21; Def. Ex. 17 at 128.)

Second, say the Defendants, the control channel uses error protection while the Accused Functionalities have no error protection. The Patent explains that "[t]he control channels...carry extensive error correction overhead. The control channel carries extensive channel coding because the accurate exchange of information over the control channel is essential for proper system operation." '205 Patent at 4:53-58. The Accused Functionalities, on the other hand, have no error protection. (Def. Ex. 20 at ¶ 90; Def. Ex. 16 at § 5.2.3.)

Finally, the Patent and the Accused Functionalities differ in the manner in which they determine channel quality. The Patent uses a BER to calculate channel

quality. '205 Patent at 6:22-28 ("The channel quality estimator 150 evaluates the [BER] of the signal arriving over the control channel. The system may infer the quality of the traffic channel based on the output of the channel quality estimator 150...") The Accused Functionalities use an SNR or SIR to calculate the channel quality. (Def. Ex. 12 at ¶¶ 66-70, 154; Def. Ex. 20 at ¶¶ 134-35, 681; Def. Ex. 7 at ¶ 44;) At oral argument, counsel for the Defendants explained that the use of a BER and SNR are materially different.

In response to the Defendants' arguments, WiAV has failed to raise any genuine issues of material dispute to show that the differences between the Patent and the Accused Functionalities are insubstantial or that they meet the function-way-result test. Rather, WiAV offers a function, way and result divorced from the language of the claims. For example, the Defendants assert that the function is "to derive a signal quality estimate from a control channel." WiAV disagrees, arguing that the function is "determining channel quality without directly measuring the quality of the traffic channel because the traffic channel is unreliable." (Pl. Opp. at 23.) WiAV's proposed function is belied by the claim terms themselves which require "monitoring the signal quality of said at

least one control channel" and "a control channel signal quality estimator." The claim language, thus, makes clear that a control channel is required.

Because WiAV has failed to show that the elements of the claims and the Accused Functionalities have similar functions, ways and results, and because WiAV fails to raise any genuine issue of material fact that the differences are insubstantial, summary judgment must be granted as to the doctrine of equivalents.

CONCLUSION

For the foregoing reasons, the Defendant's MOTION FOR SUMMARY JUDGMENT (Docket No. 309) is granted to the extent it seeks judgment under the doctrine of equivalents.

It is so ORDERED.

_____/s/ REP
Senior United States District Judge

Richmond, Virginia
Date: August 11, 2010